REMARKS/ARGUMENTS

The office action of April 7, 2005, has been carefully reviewed and these remarks are responsive thereto. Claim 35 has been amended, and claim 36 has been canceled without prejudice or disclaimer. Claims 10-35 and 37-45 thus remain pending in this application. Reconsideration and allowance of the instant application are respectfully requested.

Rejections Under 35 U.S.C. § 103

Claims 10-45 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over La Porta *et al.* (U.S. Pat. No. 6,654,359, hereinafter La Porta) in view of Rom (U.S. Pat. No. 6,360,264).

In order to reject a claim as obvious under § 103(a), three criteria must exist: 1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings; 2) there must be a reasonable expectation of success; and 3) the prior art reference(s) must teach or suggest all the claim limitations. *See* MPEP § 706.02 (j); *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991). However, even if combined, La Porta and/or Rom, alone or in combination, do not teach or suggest all the recitations of any claim.

Claim 10 and respective dependent claims

Claim 10 recites:

> In a mobile terminal, a method of facilitating a mobile Internet Protocol (IP) handoff from a source access router to one of a plurality of potential target access routers, the method comprising the steps of:
>
> (1) detecting entry into an area served by two or more of the plurality of potential target access routers;
>
> (2) transmitting an address of the source access router from the mobile terminal to one or more of the potential target access routers; and
>
> (3) performing an IP handoff operation from the source access router to one of the plurality of potential target access routers on the basis of capability information received from one or more of the plurality of potential target access routers.

Neither La Porta nor Rom describe detecting entry into an area served by two or more of the plurality of potential target access routers, recited in claim 10. The Office Action alleges that such a feature is described in La Porta at col. 14, line 39 – col. 16, line 8. However, upon review of the

cited portion of La Porta, Applicant submits that La Porta does not *detect entry into an area served by two more of the plurality of potential target access routers*, as claimed. While La Porta, at the cited portion, describes path setup messages, La Porta does not teach or even suggest that an area may be served by two more potential target access routers, as claimed. Having also reviewed the remaining portions of La Porta, Applicants find no teaching or suggestion in La Porta that the system of La Porta detects entry into an area served by two or more of the plurality of potential target access routers, as claimed. Indeed, La Porta's only references to access routers indicate:

> The method illustrated and described is applicable to each router (which, as previously described, encompasses domain base stations as well, since base stations maintain or access router capabilities to interface with the wired portion of the subnet) within a host based domain implementing HAWAII, in accordance with an exemplary embodiment of the present invention. *See* La Porta at col. 16, lines 19-26; col. 18, lines 18-24; col. 20, lines 49-55; and col. 25, lines 44-51.

Thus even if combined, La Porta and Rom do not teach or suggest detecting entry into an area served by two or more of the plurality of potential target access routers, as recited in claim 10.

In addition, the Office Action further alleges that Rom teaches or suggests the claimed feature "performing an IP handoff operation from the source access router to one of the plurality of potential target access routers on the basis of capability information received from one or more of the plurality of potential target access routers" at col. 4, lines 4-23. However, Rom does not use *access routers*, but instead uses *access points* in an entirely different type of wireless network. Those of skill in the art will appreciate that access points and access routers serve different functions, and are therefore not interchangeable. See, e.g., H. Newton, *Newton's Telecom Dictionary: The Official Dictionary of Telecommunications, Networking and the Internet, 17th Ed.*, 2001 (Access Point: Network device that interconnects a wireless radio network to a wired local area network; Access Router: An access device with built-in basic routing-protocol support, specifically designed to allow remote LAN access to corporate backbone networks.). Indeed, the term "access router" is not even present within the specification of Rom. Rom therefore fails to cure the deficiencies of La Porta, and also fails to teach or suggest step (3) of claim 10 as alleged by the Office Action.

In addition, with respect to the teachings of La Porta, La Porta indicates that it is to be implemented within a host based domain implementing HAWAII. *See* La Porta at col. 16, lines 19-26; col. 18, lines 18-24; col. 20, lines 49-55; and col. 25, lines 44-51. However, the present

application is silent as to whether the HAWAII protocol is used. Thus, there is no expectation of success in modifying La Porta to arrive at the present invention, and thus the Office Action fails to establish a *prima facie* case of obviousness for this additional reason.

For at least each of the above reasons, the Office Action fails to establish a *prima facie* case of obviousness, and claim 10 is allowable over La Porta in view of Rom. Each of dependent claims 11- 14 is allowable for at least the same reasons as independent claim 10.

In addition, with respect to claims 11, 13, and 15, because Rom does not teach or suggest the use of access routers, Rom does not teach or suggest the recitations of any of claims 11, 13 , or 15, as claimed.

Claim 15 and respective dependent claims

Independent claim 15 recites:

> 15. (original) A method of sharing capability information in a mobile communication network for use in making handoff decisions among access routers, comprising the steps of:
> (1) detecting a condition that a mobile terminal presently served by a first access router is entering an area served by a second access router;
> (2) transmitting a network address of the first access router from the mobile terminal to the second access router; and
> (3) exchanging capability information between the first access router and the second access router, such that each access router learns capabilities of the other access router.

The Office Action alleges that Rom teaches or suggestions step (3), that of exchanging capability information between the first access router and the second access router, such that each access router learns capabilities of the other access router. However, as discussed above with respect to claim 10, Rom does not teach or suggest the use of access routers, and La Porta is limited to implementations within a host based domain implementing HAWAII. Thus, the Office Action does not establish a *prima facie* case of obviousness, and claim 15 is allowable over La Porta in view of Rom. Dependent claims 16-29 are allowable for at least the same reasons as claim 15.

In addition, with respect to claim 19, Rom does not teach or suggest that the capability information comprises dynamic loading conditions associated with one of the routers. Rom makes no mention of dynamic loading conditions.

With respect to claim 20, Rom does not teach or suggest that the capability information comprises security schemes supported by one of the routers.

With respect to claim 22, La Porta does not teach or suggest that the capability information comprises signal transmission technologies supported by a base station associated with one of the access routers.

With respect to claim 23 and 27, Rom does not teach or suggest that the capability information comprises a cost of access using one of the access routers.

With respect to claims 24 and 29, as discussed above with respect to claim 10, La Porta does not detect a condition that the mobile terminal is entering an area served by at least two potential target access routers. Claim 24 is allowable for additional reasons similar to claim 10, as well as based on the allowability of claim 15.

With respect to claim 25, La Porta does not purge capability information based on an elapsed period of time, as claimed.

Claim 30 and respective dependent claims

As with claim 10, claim 30 recites finding an optimal access router to receive the handoff operation for the mobile terminal *by evaluating capability information* for a *plurality of access routers*. As discussed above, neither La Porta nor Rom teach or suggest such a feature.

The Office Action alleges that claim 30 is rejected for the same reasons as claims 15-29, the rejections of which Applicant has addressed above. Claim 30 is therefore allowable over the art of record, and dependent claims 31-34 are allowable for at least the same reasons as independent claim 30.

Claim 35 and respective dependent claims

Claim 35 has been amended to incorporate the features of claim 36, and claim 36 has been cancelled. Claim 35 now recites "a capabilities storage area reflecting capabilities needed by the mobile terminal, wherein the mobile IP handoff processing circuit transmits one or more capabilities stored in the capabilities storage area to an access router in the mobile IP network." La Porta does not teach or suggest such a feature, and as discussed above, Rom does not teach or suggest any communications with an access router. Amended claim 35 is thus allowable over the art of record. Claims 37 and 38 are allowable for at least the same reasons as amended claim 35.

Claim 39 and respective dependent claims

Claim 39 recites:

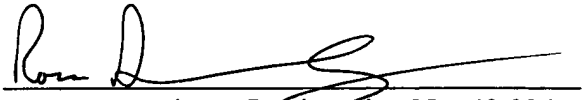
> 39. (original) An access router for use in a mobile IP network having a plurality of access routers each of which routes IP packets among mobile terminals in a service area, comprising a processor that executes computer-readable instructions for performing the steps of:
>
> (1) receiving from a mobile terminal a network address of another access router in communication with the mobile terminal;
>
> (2) storing the network address into a capabilities map that defines capabilities of geographically proximate access routers; and
>
> (3) using the stored network address to make a handoff decision concerning a second mobile terminal in the mobile IP network.

The Office Action alleges that claims 39-45 feature limitations found in claims 15-29, and are therefore rejected for the same reasons as claims 15-29. However, none of claims 15-29 recite a capabilities map as recited in claim 39. Thus, the rejection fails to address all the recitations of claim 39, and Applicant is not accorded a fair opportunity to respond. Applicants thus request the Office address the specific features of claims 39-45 in a subsequent non-final Action if the rejection is to be maintained. In addition, the art of record does not teach or suggest using the stored network address to make a handoff decision concerning a second mobile terminal in the mobile IP network, as claimed.

CONCLUSION

All rejections having been addressed, applicant respectfully submits that the instant application is in condition for allowance, and respectfully solicits prompt notification of the same. However, if for any reason the Examiner believes the application is not in condition for allowance or there are any questions, the examiner is requested to contact the undersigned at (202) 824-3153.

Respectfully submitted,
BANNER & WITCOFF, LTD.

Dated this 28 day of June, 2005 By: 

Ross Dannenberg, Registration No. 49,024

1001 G Street, N.W.
Washington, D.C. 20001-4597
Tel: (202) 824-3000
Fax: (202) 824-3001

RAD/mmd